

Technical Visit to Chemical Waste Treatment Centre (CWTC)

By Sam LO Man Lap

The Technical Visit to Chemical Waste Treatment Centre (CWTC) event was successfully held on 9th December 2017. It provided participants with an insight into the chemical waste treatment process and technologies.

Commissioned in 1993, the facility was designed with capacity in processing 100,000 tonnes chemical waste, marine pollution waste (MARPOL waste) and clinical waste per year.

During the visit, various facilities such as the Mercury Waste Treatment Facility (MWTF) were introduced. The facility treats mercury containing waste and recovers mercury from it. It has been upgraded and tested in order to cope with the increasing demand for the treatment of mercury containing wastes, in particular, compact fluorescent lamps. The walkthrough tour carried on to other items, such as the Incineration System for treating chemical and clinical wastes by high-temperature incineration; the Copper Recovery Process recovers copper from waste generated from electroplating industry; the Oil and Water Separation Process for treating MARPOL Waste and recovers oil from it. The participants were able to pay visit to these machine in a close position but in a safe distance, allowing us to observe into the details and deepen the understanding towards different treatment process.

Along with treating a variety of hazardous waste arising in Hong Kong, the CWTC's environmental performance has also proven to be met with the highest emission standards in the world. For instance, the CWTC is required to meet the dioxins emission standard of $0.1 \text{ ng I-TEQ}/m^3$, which amongst the most stringent standards adopted in the world as compared to similar facilities in other countries. Another feature of the design was to compactly house the systems within a site area of about 2 hectares.

The technical visit was insightful, which provided participants with the fundamental knowledge in waste treatment, as well as the specific design features of CWTC. After a brief but active discussion in Q&A session, the visit was finished fruitfully. We would like to thank Ms. Winnie YEUNG from ECOSPACE Ltd. for help in making this delightful event successful.

